

The listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A semiconductor device comprising:
  - an antenna;
  - an integrated circuit comprising a thin film transistor;
  - a light-receiving element configured to receive a signal by optical communication;and
  - a light-emitting element configured to transmit a signal by optical communication, wherein the light-receiving element has a layer for conducting photoelectric conversion using a non-single crystal thin film,
  - wherein the light-emitting element has an electroluminescent layer using a non-single crystal thin film,
  - wherein the integrated circuit includes a power supply circuit configured to generate a power supply voltage by using from an alternating voltage generated by the antenna, and
  - wherein the antenna, the light-emitting element and the light-receiving element are electrically connected to the integrated circuit on the same substrate.

2. (Currently Amended) A semiconductor device comprising:
  - an antenna;
  - an integrated circuit comprising a thin film transistor;
  - a light-receiving element configured to receive a signal by optical communication;and
  - a light-emitting element configured to transmit a signal by optical communication,

wherein the antenna, the light-emitting element and the light-receiving element are electrically connected to the integrated circuit,

wherein the integrated circuit includes a power supply circuit configured to generate a power supply voltage ~~by using~~ from an alternating voltage generated by the antenna, and

wherein the integrated circuit, the light-emitting element and the light-receiving element are formed on the same substrate.

3. (Currently Amended) A semiconductor device comprising:

an antenna;

an integrated circuit comprising a thin film transistor;

a light-receiving element configured to receive a signal by optical communication;

and

a light-emitting element configured to transmit a signal by optical communication,

wherein the antenna, the light-emitting element and the light-receiving element are electrically connected to the integrated circuit,

wherein the integrated circuit includes a power supply circuit configured to generate a power supply voltage ~~by using~~ from an alternating voltage generated by the antenna, and

wherein the antenna, the integrated circuit, the light-emitting element and the light-receiving element are formed on the same substrate.

4. (Previously Presented) A semiconductor device comprising:

an integrated circuit;

a light-receiving element configured to receive a signal by optical communication;

and

a light-emitting element configured to transmit a signal by optical communication,

wherein the integrated circuit comprises a connection terminal, a rectification circuit configured to rectify an alternating voltage generated by an antenna, a power supply circuit configured to generate a power supply voltage by using a voltage outputted from the rectification circuit, a demodulation circuit, and a logic circuit, and

wherein the integrated circuit, the light-emitting element and the light-receiving element are formed on the same substrate.

5. (Currently Amended) A semiconductor device comprising:

an antenna;

an integrated circuit comprising a thin film transistor;

a light-receiving element configured to receive a signal by optical communication;

and

a light-emitting element configured to transmit a signal by optical communication,

wherein the light-receiving element has a layer for conducting photoelectric conversion using a non-single crystal thin film,

wherein the light-emitting element has an electroluminescent layer using a non-single crystal thin film,

wherein the antenna, the light-emitting element and the light-receiving element are electrically connected to the integrated circuit,

wherein the integrated circuit, the light-emitting element and the light-receiving element are attached to a substrate with an adhesive agent, and

wherein the integrated circuit includes a power supply circuit configured to generate a power supply voltage ~~by using~~ from an alternating voltage generated by the antenna.

6. (Currently Amended) A semiconductor device comprising:

an antenna;

an integrated circuit comprising a thin film transistor;

a light-receiving element configured to receive a signal by optical communication;  
and

a light-emitting element configured to transmit a signal by optical communication,  
wherein the antenna, the light-emitting element and the light-receiving element  
are electrically connected to the integrated circuit,

wherein the integrated circuit, the light-emitting element and the light-receiving  
element are attached to a substrate with an adhesive agent, and

wherein the integrated circuit includes a power supply circuit configured to  
generate a power supply voltage by-using from an alternating voltage generated by the  
antenna.

7. (Currently Amended) A semiconductor device comprising:

an antenna;

an integrated circuit comprising a thin film transistor;

a light-receiving element configured to receive a signal by optical communication;

and

a light-emitting element configured to transmit a signal by optical communication,  
wherein the antenna, the light-emitting element and the light-receiving element  
are electrically connected to the integrated circuit,

wherein the antenna, the integrated circuit, the light-emitting element and the  
light-receiving element are attached to a substrate with an adhesive agent, and

wherein the integrated circuit includes a power supply circuit configured to  
generate a power supply voltage by-using from an alternating voltage generated by the  
antenna.

8. (Previously Amended) A semiconductor device comprising:

an integrated circuit;

a light-receiving element configured to receive a signal by optical communication;  
and

a light-emitting element configured to transmit a signal by optical communication,  
wherein the integrated circuit comprises a connection terminal, a rectification circuit configured to rectify an alternating voltage generated by an antenna, a power supply circuit configured to generate a power supply voltage by using a voltage outputted from the rectification circuit, a demodulation circuit, and a logic circuit,

wherein the integrated circuit, the light-emitting element and the light-receiving element are formed integrally, and

wherein the integrated circuit, the light-emitting element and the light-receiving element are attached to a substrate with an adhesive agent.

9. (Previously Presented) The semiconductor device according to any one of Claims 5 to 8, wherein the substrate is a plastic substrate.

10. (Currently Amended) An IC card comprising:

an antenna;

an integrated circuit comprising a thin film transistor;

a light-receiving element configured to receive a signal by optical communication;

and

a light-emitting element configured to transmit a signal by optical communication,  
wherein the antenna, the light-emitting element and the light-receiving element are electrically connected to the integrated circuit,

wherein the integrated circuit includes a power supply circuit configured to generate a power supply voltage ~~by using~~ from an alternating voltage generated by the antenna, and

wherein the integrated circuit, the light-emitting element and the light-receiving element are formed on the same substrate.

11. (Previously Presented) The IC card according to claim 10, wherein the antenna, the integrated circuit, the light-emitting element and the light-receiving element are formed on the same substrate.

12. (Previously Presented) An IC card comprising:  
an integrated circuit;  
a light-receiving element configured to receive a signal by optical communication;  
and  
a light-emitting element configured to transmit a signal by optical communication,  
wherein the integrated circuit comprises a connection terminal, a rectification circuit configured to rectify an alternating voltage generated by an antenna, a power supply circuit configured to generate a power supply voltage by using a voltage outputted from the rectification circuit, a demodulation circuit, and a logic circuit, and  
wherein the integrated circuit, the light-emitting element and the light-receiving element are formed on the same substrate.

13. (Currently Amended) An IC card comprising:  
an antenna;  
an integrated circuit comprising a thin film transistor;  
a light-receiving element configured to receive a signal by optical communication;  
and  
a light-emitting element configured to transmit a signal by optical communication,  
wherein the antenna, the light-emitting element and the light-receiving element are electrically connected to the integrated circuit,  
wherein the integrated circuit, the light-emitting element and the light-receiving element are attached to a substrate with an adhesive agent,

wherein the integrated circuit includes a power supply circuit configured to generate a power supply voltage ~~by using~~ from an alternating voltage generated by the antenna.

14. (Previously Presented) The IC card according to claim 13, wherein the antenna and the integrated circuit in addition to the light-emitting element and the light-receiving element are attached to the substrate with an adhesive agent.

15. (Previously Presented) The IC card according to claim 12, wherein the integrated circuit, the light-emitting element and the light-receiving element are attached to a substrate with an adhesive agent.

16. (Previously Presented) The IC card according to any one of Claims 12-13, wherein the substrate is a plastic substrate.